

21 November 1986.

To: Capt. Anthony Maness Subj: Revised Comments post-Reykjavik Cf: my memo of 16 November From: J. Lederberg:

0. I very much appreciated our conversations, which helped to clarify my own thinking. As you understood very well, I was responding - in some measure inappropriately - more to my colleagues on the CEP than to the tasking document. Our own talks left me fully reassured that you fully understood my intentions; but I submit this revision now for the record.

1. The sweeping proposals for prompt total denuclearization, or for the elimination of all OSBMs, are fraught with many flaws. To achieve those ends would require drastic renovations of the global geopolitical atmosphere, of regimes of verification, of conventional forces, of strategic defensive technology, that will surely take much longer than the decade. Most constructively, we can use our imagination to outline a series of steps dedicated to those ends, each of which can be traversed with less risk than we now entertain. They should be more than symbolic gestures, if only to exercise the ingredients of the renovations just mentioned.

2. The Soviets obviously will agree to nothing that does not serve their interest; and the political dynamics of negotiation between a democratic and a totalitarian state are likely again to give them some relative net advantage in the actual outcome of any arms control agreement. The game is not, however, strictly zero-sum and we may have an opportunity for substantial net gains for our own interests. We should start with concepts that best match our security interests, shape them for feasibility on the Soviet side, then consider the best strategies (bargains and tradeoffs) to succeed at the negotiating table. The process is greatly complicated by inter-service competition, and it may be awkward for the CNO to be proposing steps that seem to favor the Navy's preeminence in strategic forces. At least start with a clear self-understanding prior to entering the realities of political compromise; be it with other services or with the adversary.

3. Highly MIRV'd, fixed based ICBM's are widely recognized to constitute the most menacing and destabilizing parts of each side's strategic deterrent. One of our policy objectives should remain the elimination of these units on both sides. As the Soviet force depends so highly on these (e.g. SS-18s) we have to consider reasonable bargaining incentives for them to consider the costly replacement of the MIRV'd ICBMs with small ICBMs, SLBM's, etc. This can be mitigated by a program over a fairly extended period of time that put the thrust of these revisions into the modernization of forces. To sustain the verifiability of these commitments, we need early agreement to restrain the testing of new mobile systems with MIRV capability. Our offer might also be brought closer to parity if we brought our own land-based force to a small number, perhaps no more than a few hundred, or even approaching zero. These would all be single-warhead BMs. In the context of substantial net reductions, we need to do a fundamental optimization of the mix of warheads on these, on CM's, <sup>on</sup> bombers, on SSBNs. The least costly option would be to retain a large part of our existing SSBN force.

4. A first step towards constructing an agreement would be a timetable agreed to by

each side for reducing the average MIRV ratio: this to be achieved by whatever mix each side decides is in its own best interest. An early agreement to reduce this to 2.0 or below by 1991 is probably more achievable, and may be more desirable, than an overall force reduction that left SS-18s opposed by MXs in substantial numbers. MIRV'd SLBMs are less dangerous than vulnerable ICBMs; but it may be difficult to persuade the Soviets to credit this. It may even be to our advantage to trade in some numerical disparity; e.g. to discount single-warhead fixed ICBMs in the interim counting rules (in the same spirit as an offer to do that for bombs) but this needs deeper consideration, and in any case is hardly to be advertised. Alternatively, an offer to take down all of our ICBMs, large and small, might be the needed incentive for their agreement to de-MIRV their entire ICBM force, keeping parity of total warheads. Reasonable objections can be anticipated to an agreement that froze the US out of any future option of small ICBMs; but this may be more tenable as an interim stage looking towards still more comprehensive reductions as a long range objective.

5. The attached papers by May, Bing and Steinbruner show that homogeneous cuts of up to 50% do not greatly affect the strategic balance or retaliatory capability, and therefore the credibility of deterrence. Nor do they accomplish very much in stabilizing the international environment, except as they indicate a trend that reverses the alarming build-UPs of the past decade. The de-MIRVing proposals in Section 4. are equivalent to, or extensions of, Case C. in the May-Bing-Steinbruner models.

6. The manned-bomber element of the triad stands intermediate in survivability, offers flexibility in operations; and its potential growth may help answer the Air Force's concerns about sustaining its strategic role and mission.

7. Very large cuts in nuclear forces (perhaps beyond the 80% mark) begin to raise new questions about the credibility of extended deterrence, and the adequacy of our conventional forces. Up to that point, the contest is one of resolve more than of force. We have little clarity how to achieve, even less how to persuasively communicate that resolve, a persistent flaw in our models of extended deterrence: the same dilemma that drives the aspiration to defensive approaches to security. Conventional force reduction to one that approaches balance is a more reliable answer and may be negotiable in the "Spirit of Reykjavik".

8. Much of the above may soon be moot! We have not begun to face up to the looming unverifiability of mobile BM's and CM's. There are proposals of marginal credibility for verification of [production of] these systems. Time is running out for putting such verification systems in place; and that is unlikely except in a context of far more US/USSR cooperation than we have seen in recent history or is likely to happen. Continued engagement with the USSR on the range of issues raised at Reykjavik is probably the only way, if any, of evolving that context.

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Our conversations also touched on needs for realistic time scales and staging of the

evolution of the demissilized world regime. At each stage, the current technology, and forecasts for what is in the offing, need to be reassessed. For example, SDI-related technologies may have offensive implications difficult to foresee at this time; and we do not know just how verifiability of mobile systems will work out. On the other hand, a strategic defense system designed to deal with a few leaks, cheats and accidents may be achievable sooner, with more modest technology and be less likely to upset the offensive balance than some expectations laid on the current SDI program.

Not explicitly talked about:

Enhanced cooperation in verification would be a cardinal forward step: one in Gorbachev's power to offer at very little tangible cost to his side would be to decrypt their missile telemetry. Dare I suggest that this characterization of such a gesture has any greater likelihood of success than marking the encryption as a treaty violation? Something like that may have happened in the way the Russians are now dealing with consultation on verification under the Biological Warfare convention. (If important, I can amplify.)